

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant: Manfred Geier, et al.
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Examiner: Lee D. Wilson
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Customer No.: 24,239

Title: RELEASE EXPLOSION DAMPER

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Commissioner for Patents
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STATEMENT OF THE SUBSTANCE OF INTERVIEWS

Sir:

This statement is in regards to the telephonic interviews of February 15, 2011 (the “February 15th Interview”) and March 15, 2011 (the “March 15th Interview”) between Examiner Lee Wilson and Applicant’s attorney Matt Witsil. In the February 15th Interview the attached claim amendments were agreed upon to result in the claims being allowable, and were to be entered by Examiner’s amendment. In the March 15th Interview, the Examiner agreed to issue a Supplemental Examiner’s Amendment to amend the claims that were allowed in the first Examiner’s Amendment dated as mailed February 18, 2011, which included an incorrect version of the claims, to reflect the attached claims.

Listing of claim amendments as agreed upon in the February 15th Interview:

1. (Currently amended) A clamping or spreading tool, comprising:
 - a push or pull rod to which a movable jaw is fixed;
 - a stationary jaw;
 - a gear mechanism by which the movable jaw is movable towards or away from the stationary jaw by displacement of the push or pull rod in a clamping or spreading direction and by which clamping or spreading forces are applied between the jaws;
 - a lock that blocks displacement of the push or pull rod in an opening direction opposite to the clamping or spreading direction so as to maintain the clamping or spreading forces generated between the jaws; and
 - a force dissipating mechanism for dissipating the clamping or spreading forces stored that allows absorption displacement of the push or pull rod in the opening direction along a predetermined absorption path and blocks absorption displacement of the push or pull rod in the opening direction beyond the predetermined absorption path upon release of the lock, said force dissipating mechanism including a release lever to release the lock and an entraining slide element to block the absorption displacement of the push or pull rod in the opening direction beyond the predetermined absorption path upon release of the lock, wherein said release lever includes a contacting member which is offset from and contacts an elongated member with a projection extending therefrom, thereby allowing said absorption displacement.
2. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the means for dissipating force dissipating mechanism is adapted to be activated by an operator such that, upon activation, the absorption displacement of the push or pull rod in the opening direction along the absorption path is allowed independently and, after the absorption displacement, an absorption displacement limitation takes hold automatically.
3. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the means for dissipating force dissipating mechanism can be activated only upon

release of the blocking effect of the lock.

4. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the means for dissipating force dissipating mechanism can be activated when clamping or spreading forces are held at the lock.

5. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the means for dissipating force dissipating mechanism is or remains deactivated when the tool is not tensioned.

6. (Previously presented) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the lock is shiftable essentially in the opening direction with respect to the stationary jaw, while maintaining its blocking effect, so as to provide the absorption displacement.

7. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the lock is arranged in a support in such a way as to be shiftable in the opening direction while its blocking effect is upheld, the support carrying the stationary jaw and holding the push or pull rod for displacement.

8. (Currently amended) The clamping or spreading tool as claimed in claim 6, wherein the lock is shiftable from a resting position in which it may be forcibly adjusted upon activation of the means for dissipating force dissipating mechanism into an absorption end position.

9. (Previously presented) The clamping or spreading tool as claimed in claim 6, wherein shiftability of the lock is limited by an abutment formed on the support.

10. (Previously presented) The clamping or spreading tool as claimed in claim 6, wherein the shift distance travelled by the lock during absorption displacement substantially equals the predetermined absorption path.

11. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the means for dissipating force dissipating mechanism comprises a drive for shifting the lock, with the push or pull rod-locked to the lock in the opening direction.
12. (Previously presented) The clamping or spreading tool as claimed in claim 11, wherein a the drive is to be implemented by an operator and comprises an eccentric bearing for the lock, such that at least part of the clamping or spreading forces can be introduced into the lock to be shifted.
13. (Previously presented) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the lock is formed by a plate-type lock which is forcibly canted with respect to the push or pull rod to block displacement of the push or pull rod in the opening direction.
14. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the means for dissipating force dissipating mechanism comprises two plate-type locks, one of which is shiftable with respect to the stationary jaw essentially in the opening direction for providing the absorption displacement while the forced canting with respect to the push or pull rod is upheld, whereas the other one is arranged stationarily with respect to the stationary jaw, maintaining the forced canting with respect to the push or pull rod.
15. (Previously presented) The clamping or spreading tool as claimed in claim 14, herein the forced canting of the stationary plate-type lock can be lifted before the forced canting of the shiftable plate-type lock.
16. (Previously presented) The clamping or spreading tool as claimed in claim 14, wherein the clamping or spreading forces released upon lifting of the forced canting of the stationary plate-type lock can be introduced into the shiftable plate-type lock such that the shiftable plate-type lock, together with the push or pull rod canted with respect to the same, are shifted from a starting position into and end position at which further shifting is prevented.

17. (Previously presented) The clamping or spreading tool as claimed in claim 14, wherein the shiftable plate-type lock comprises a wedging plate which is forcibly canted to the push or pull rod so that displacement of the push or pull rod in the opening direction with respect to the wedging plate is blocked, said wedging plate contacting a movable place for engagement.

18. (Previously presented) The clamping or spreading tool as claimed in claim 17, wherein the wedging plate constitutes an entraining slide element of the gear mechanism designed as a stepping gear, and the movable place for engagement is presented by the location of power transmission from the entraining slide element into a movable, swingable actuating arm of the stepping gear.

19. (Previously presented) The clamping or spreading tool as claimed in claim 18, wherein the actuating arm has a mid position at which the actuating arm is positioned when unloaded, a stroke end position into which the actuating arm can be moved when actuated by an operator to displace the push or pull rod in the clamping or spreading direction, and an absorption end position, opposed to the stroke end position, into which the actuating arm can be moved for shifting the entraining slide element, while maintaining the forced canting thereof, and at which the actuating arm strikes against an abutment present on a support for providing limitation of the absorption displacement.

20. (Currently amended) The clamping or spreading tool as claimed in claim 27 [[1]], wherein the means for dissipating force dissipating mechanism comprises a damper which dampens the absorption displacement of the push or pull rod along the absorption path.

21. (Currently amended) The clamping or spreading tool as claimed in claim 20, wherein the damper is activated only when the means for dissipating force dissipating mechanism for absorption displacement of the push or pull rod in the opening direction is activated.

22. (Previously presented) The clamping or spreading tool as claimed in claim 20, further comprising an actuating arm that operatively engages the entraining slide element, and wherein

the damper is formed by a centering spring comprising a compression spring adapted to be tensioned by shifting of the lock essentially in the opening direction.

23. (Previously presented) The clamping or spreading tool as claimed in claim 22, wherein the centering spring is disposed between a support which holds the stationary jaw and the actuating arm.

24. (Currently amended) The clamping or spreading tool as claimed in claim 22, wherein the centering spring and a gear spring for canting the entraining slide element are harmonized such that the actuating arm is forcibly positioned in a mid position out of which lifting motion for the gear mechanism contrary to the gear spring and absorption motion for the means for dissipating contrary to the centering spring are allowed.

25. (Previously presented) The clamping or spreading tool as claimed in claim 22, wherein the centering spring tensioned in the absorption end position of the actuating arm can be relieved of tension by lifting the forced canting of the entraining slide element, the relaxing centering spring, at the same time, urging the actuating arm into the mid position.

26. (Previously presented) A clamping or spreading tool, comprising:

- a push or pull rod to which a movable jaw is fixed;
- a stationary jaw;
- a gear mechanism by which the movable jaw is movable towards or away from the stationary jaw by displacement of the push or pull rod in a clamping or spreading direction and by which clamping or spreading forces are applied between the jaws;
- a lock that blocks displacement of the push or pull rod in an opening direction opposite to the clamping or spreading direction so as to maintain the clamping or spreading forces generated between the jaws; and
- a force dissipating mechanism for dissipating the clamping or spreading forces stored that allows absorption displacement of the push or pull rod in the opening direction and blocks absorption displacement of the push or pull rod in the opening direction

beyond a predetermined distance upon release of the lock, wherein the force dissipating mechanism comprises two plate-type locks, one of which is shiftable with respect to the stationary jaw essentially in the opening direction for providing the absorption displacement while the forced canting with respect to the push or pull rod is upheld, whereas the other one is arranged stationarily with respect to the stationary jaw, maintaining the forced canting with respect to the push or pull rod, wherein said release lever includes a contacting member which is offset from and contacts an elongated member with a projection extending therefrom, thereby allowing said absorption displacement.

27. (Previously presented) A clamping or spreading tool, comprising:
 - a push or pull rod to which a movable jaw is fixed;
 - a stationary jaw;
 - a gear mechanism by which the movable jaw is movable towards or away from the stationary jaw by displacement of the push or pull rod in a clamping or spreading direction and by which clamping or spreading forces are applied between the jaws;
 - a lock that blocks displacement of the push or pull rod in an opening direction opposite to the clamping or spreading direction so as to maintain the clamping or spreading forces generated between the jaws; and
 - means for dissipating the clamping or spreading forces stored that allows absorption displacement of the push or pull rod in the opening direction along a predetermined absorption path and blocks absorption displacement of the push or pull rod in the opening direction beyond the predetermined absorption path upon release of the lock.
28. (Previously presented) A clamping or spreading tool, comprising:
 - a push or pull rod to which a movable jaw is fixed;
 - a stationary jaw;
 - a gear mechanism by which the movable jaw is movable towards or away from the stationary jaw by displacement of the push or pull rod in a clamping or spreading

direction and by which clamping or spreading forces are applied between the jaws;

a lock that blocks displacement of the push or pull rod in an opening direction opposite to the clamping or spreading direction so as to maintain the clamping or spreading forces generated between the jaws; and

a force dissipating mechanism for dissipating the clamping or spreading forces stored that allows absorption displacement of the push or pull rod in the opening direction along a predetermined absorption path and blocks absorption displacement of the push or pull rod in the opening direction beyond the predetermined absorption path upon release of the lock, said force dissipating mechanism including:

a release lever to release the lock;

an entraining slide element to block the absorption displacement of the push or pull rod in the opening direction beyond the predetermined absorption path upon release of the lock; and

an actuating arm operatively engaging the entraining slide element, the actuating arm including a pivotal projecting stop for carrying out translatory motion in the longitudinal direction of the push rod to allow shifting of the entraining slide element.

29. (Previously presented) The clamping or spreading tool as claimed in claim 28, wherein the actuating arm has a mid position at which the actuating arm is positioned when unloaded, a stroke end position into which the actuating arm can be moved when actuated by an operator to displace the push or pull rod in the clamping or spreading direction, and an absorption end position, opposed to the stroke end position, into which the actuating arm can be moved for shifting the entraining slide element, while maintaining the forced canting thereof, and at which the actuating arm strikes against an abutment present on a support for providing limitation of the absorption displacement.

Statement of the Substance of Interviews
Interviews of February 15, 2011 and March 15, 2011

Respectfully submitted,

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(Applicants)

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